

## **REMARKS**

Claims 60-72 were pending. By this amendment, claims 60, 63, and 70 are amended, claim 65 is cancelled and claim 73 is new. Support for the amendments to claims 60, 63, and 70 and new claim 73 may be found in the specification and claims as originally filed. In particular, support for the amendments may be found at page 4, lines 8-13 and Figs. 2-6 of the application as originally filed. No new matter is added. As a result, claims 60-64 and 66-73 are pending and at issue. In view if the attached Request for Continued Examination and required fees, reconsideration and allowance of claims 60-64 and 66-73 is respectfully requested.

### **Rejection Under 35 U.S.C. § 112**

The applicants respectfully traverse the rejection of claims 63 and 70 under 35 U.S.C. § 112, second paragraph as indefinite. Amended claim 63 recites “at least one” flange that is substantially circular in shape. This recitation is plausible and consistent with the original disclosure, as acknowledged by the Board of Patent Appeals and Interferences. See *Ex parte Raviv*, mailed July 19, 2006, at page 9. Thus, the applicants respectfully request withdrawal of the rejection of claim 63.

Amended claim 70 includes the limitation “when the probe is received within the passage,” thus clarifying the relationship between the probe and the probe tip. As a result, claim 70 does not claim the probe, but only recites the probe to further define the structure of the probe tip. The Board of Patent Appeals and Interferences indicated that claim 70 should be qualified by reciting “when the probe is received within the passage.” See *Ex parte Raviv*, page 10. Thus, claim 70 is no longer indefinite and the applicants respectfully request withdrawal of the rejection of claim 70.

### **Rejection Under 102 - Baum**

The applicants respectfully traverse the rejection of claims 60-72 as anticipated by U.S. Patent No. 2,487,038 to Baum (“Baum”). “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628 (Fed. Cir. 1987). The cited fails to disclose or suggest each and every element recited by the claims. In particular, each of claims 60-72 recites an ear probe tip having a plurality of flanges extending substantially perpendicularly from the outer surface of the ear probe tip. Baum fails to disclose or suggest this limitation.

While Baum discloses an ear insert for earphones, the ear insert having a plurality of flexible skirt-like protrusions extending from the ear insert, the plurality of protrusions are not substantially perpendicular to the wall member of the ear insert. In fact, Baum teaches that the plurality of protrusions projects “in [an] outward and rearward direction.” See Baum, col. 4, lines 5-8. Thus, the protrusions of Baum are angled rearward and Baum fails to teach a perpendicular protrusion of any sort. See also the rearward angle of the protrusions in Figs. 1-5 of Baum. As a result, Baum cannot anticipate any of claims 60-72. The applicants respectfully request withdrawal of the rejection of claims 60-72.

Moreover, one of ordinary skill in the art would not be motivated to alter the orientation of the protrusions because Baum teaches that the rearward projection enhances an acoustic seal such that “upon insertion of the ear insert channel member 11, into the ear cavity, the outer edge region of the individual protrusions 41, 42, 43 will engage and become wedged against the surrounding surface portions of the outer ear cavity for automatically establishing therewith an acoustic seal.” See Baum, col. 4, lines 8-13. Accordingly, there is no motivation to modify the orientation of the protrusions of the Baum device.

### **Rejection Under 102 - Ochi.**

The applicants respectfully traverse the rejection of claims 60-72 as anticipated by U.S. Patent No. 5,540,063 to Ochi et al. (“Ochi”). Ochi fails to disclose or suggest each and every limitation recited by claims 60-72. In particular, each of claims 60-72 now recites an ear probe tip having a plurality of flanges extending substantially perpendicularly from the outer surface of the ear probe tip.

While Ochi discloses a sound wave attenuation device that has a proximal member 12 that includes several umbrella shaped flanges, the umbrella shaped flanges are not perpendicular to the proximal member 12. In particular, Ochi teaches that each flange should be “oriented such that convex surfaces of the flanges face proximal end 16 and concave surfaces face distal end 18.” See Ochi, col. 3, lines 33-37. Thus, Ochi teaches that the flanges should angle rearward (like the protrusions of Baum). As a result, Ochi fails to disclose or suggest a perpendicular flange of any sort. Therefore, none of claims 60-72 are anticipated by Ochi. The applicants respectfully request withdrawal of the rejection of claims 60-72.

Additionally, each of claims 60-72 now recites a flange closest to the second opening that is offset from the second end. Ochi fails to disclose or suggest this limitation. In particular, as best seen in Figs. 1, 2, 4, and 5, the proximal flange 56 is adjacent the end of the

proximal member 12. The convex surface of proximal flange 56 is integral with the end of the proximal member 12. As a result, there can be no offset between the proximal flange 56 and the end of the proximal member. Thus, Ochi fails to disclose or suggest a flange closest to the second opening that is offset from the second end as is recited by each of claims 60-72. For this additional reason, the applicants respectfully request withdrawal of the rejection of claims 60-72.

### **Rejection Under 102 - Killion**

The applicants respectfully traverse the rejection of claims 60-72 as anticipated by U.S. Patent No. 5,113,967 to Killion et al. (“Killion”). Killion fails to disclose or suggest each and every limitation recited by claims 60-72. In particular, each of claims 60-72 now recites an ear probe tip having a plurality of flanges extending substantially perpendicularly from the outer surface of the ear probe tip.

While Killion discloses an earplug that has an ear tip which includes three flanges, the flanges are not perpendicular to the ear tip. In particular, Killion teaches that each flange should be angled rearward (like the protrusions of Baum) to seal the ear tip to the ear. See Killion col. 7, line 19 and Figs. 1, 3, 4A, 5 and 9A. Thus, Killion, like Baum and Ochi, teaches that the flanges should angle rearward. As a result, Killion fails to disclose or suggest a perpendicular flange of any sort. Therefore, none of claims 60-72 are anticipated by Killion. The applicants respectfully request withdrawal of the rejection of claims 60-72.

Additionally, each of claims 60-72 now recites a flange closest to the second opening that is offset from the second end. Killion fails to disclose or suggest this limitation. In particular, as best seen in Figs. 1, 5, and 9A, the forwardmost flange 34A is adjacent the end of the ear tip 30. In fact, the forward surface of the flange 34A is integral with the end of the ear tip 30. As a result, there can be no offset between the flange 34A and the end of the ear tip. Thus, Killion fails to disclose or suggest a flange closest to the second opening that is offset from the second end as is recited by each of claims 60-72. For this additional reason, the applicants respectfully request withdrawal of the rejection of claims 60-72.

### **Rejection Under 103 - Kerouac in view of Baum**

The applicants respectfully traverse the rejection of claims 60-72 as obvious over U.S. Patent No. 4,057,051 to Kerouac in view of Baum. To establish a *prima facie* case of obviousness, “the prior art reference (or references when combined) must teach or suggest all the claim limitations.” M.P.E.P. § 2143. The cited art fails to disclose or suggest all claim limitations. In particular, the cited art fails to disclose or suggest an ear probe tip having a

plurality of flanges extending substantially perpendicularly from the outer surface of the ear probe tip.

As shown above, Baum fails to disclose or suggest perpendicular flanges of any sort. Kerouac fails to correct the deficiency of Baum. In particular, Kerouac fails to disclose flanges of any sort, let alone flanges that extend perpendicularly to an ear probe tip. See Kerouac Figs. 1, 2, 5, and 8. Thus, a *prima facie* case of obviousness cannot be shown because Kerouac and Baum fail to disclose or suggest each and every limitation recited by claims 60-72. Accordingly, the applicants respectfully request withdrawal of the rejection of claims 60-72.

Furthermore, there is no motivation to combine Kerouac and Baum. Specifically, one of ordinary skill in the art, after reading Kerouac, would not be motivated to provide flanges on the probe tip disclosed by Kerouac because the “resilient cuff 12, on the ear tube is positioned on the inner end of the tube 10 for forming the air-tight or hermetic seal with the canal walls 9.” See Kerouac, col. 2, lines 20-23 and Fig. 8, emphasis added. One of ordinary skill in the art, already knowing that the Kerouac device provides an “air-tight” seal would not add flanges to the resilient cuff for fear of upsetting the seal. Thus, there can be no motivation to combine Kerouac and Baum. For this additional reason, the applicants respectfully request withdrawal of the rejection of claims 60-72.

### **New Claim 73**

New claim 73 positively recites an ear probe and an ear probe tip arranged such that when the ear probe is disposed within the ear probe tip, a distance between an end of the ear probe and an end of the ear probe tip is insufficient to form an “acoustic channel.” One feature of the instant invention is that the probe and tip interact to eliminate the need for an acoustic channel. See the instant application, page 2, lines 14-15. This lack of an acoustic channel is contrary to the express teachings of Baum, Ochi and Killion (Kerouac seems silent on the subject).

In particular, Baum teaches a “sound passage 20” extending axially through the ear insert 11. See Baum, col. 2, lines 24-26. Further, “when the ball members 31, 32, 33 are bent at various angles . . . the sound passage 20 . . . remains open and the entire sound passage 20 of the channel member 11 remains fully effective for transmitting sound from the sound transmitting device toward the ear canal.” See Baum, col. 3, lines 30-38.

Likewise, Ochi teaches a soundwave passageway 54 running through a proximal member 12. See Ochi, col. 3, lines 16-18. Sound waves travel through this soundwave

passageway 54 and exit through an outlet aperture 52. See Ochi, col. 3, lines 20-24. The soundwaves must be accurately transmitted through this passageway because the Ochi device is a sound attenuation device which simply reduces the Db of incoming sound to protect a user's eardrum. Once the Db is reduced, however, the remaining sound must be accurately transmitted so that the user can interpret the sounds of his/her environment.

Similarly, Killion teaches an "inner sound channel" in a premolded eartip 30. See Killion col. 7, lines 15-18. Like Ochi, the Killion device is a protective earplug that reduces the Db of incoming sound. Thus, the remaining sound must be accurately transmitted to the user's eardrum, especially since the Killion device is to be used by "symphony musicians, rock musicians, and others who need some hearing protection but also need to hear clearly while wearing earplugs." See Killion, col. 1, lines 31-34, emphasis added.

As a result, each of Baum, Ochi, and Killion clearly teaches the need for a "sound passageway" or "acoustic channel." Thus, no combination of Baum, Ochi, and Killion could anticipate or render obvious claim 73 which recites a configuration designed to eliminate an acoustic channel. Thus, the applicants respectfully request favorable action for claim 73.

### **Conclusion**

The applicants respectfully request entry of the amendments and consideration of the remarks set forth above. Enclosed please find a check in the amount of \$790.00 and a Request for Continued Examination. No other fees are believed due, as there is no net increase of claims. However, the commissioner is authorized to charge any further payment required in connection with the filing of this paper or to credit any overpayment to Deposit Account 13-2855. A duplicate copy of this paper is enclosed.

Respectfully submitted,

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**September 19, 2006**